



CHAPTER 90: CRITICAL AREAS UPDATE

FEBRUARY 25, 2016

PLANNING COMMISSION STUDY SESSION



AGENDA

Policy discussions on:

- Wetland Rating System
- Wetland Buffer Width Options
- Mitigation Sequencing
- Wetland Compensatory Mitigation Ratios
- Stream Typing System
- Stream Buffer Width Options
- Setback from Wetland and Stream Buffers
- Reasonable Use Exception

BACKGROUND

- **Existing** structures and improvements will not be affected by the new regulations. They are “grandfathered” in.
- **New structures**, including decks, patios and sheds, enlargements of existing structures or new landscaping with non-native vegetation would be restricted if located in a buffer
- Regulations must meet accepted **Best Available Science** under GMA
- City does have some **flexibility** with setbacks from buffers, minor improvements in buffer, off-site mitigation, and non-conformances

GMA: BEST AVAILABLE SCIENCE (BAS) AND WAC PROVISIONS

- GMA requires City to use BAS for its stream and wetland regulations
 - Department of Ecology BAS guidance on wetland rating system, wetland buffers and mitigation
 - BAS on stream buffers and mitigation
 - WAC on stream typing
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- If Kirkland does not use accepted BAS, must come up with **alternative approach** (expensive and time consuming) and defend it. Can be appealed

WETLAND RATING SYSTEM (BAS)

- Ecology's **2014 Washington State Wetland Rating System**
- Categories wetlands based on:
 - Sensitivity to disturbance
 - Rarity
 - Ability to replace them
- Rating categories are the basis of the buffers widths & mitigation regulations by wetland type
- Rating system widely used, including Army Corps of Engineer

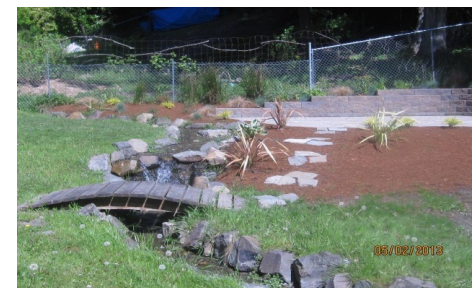
Staff recommendation: Use 2014 Ecology rating system

WETLAND BUFFER WIDTHS (BAS)

Two type of **buffer width** options based on Ecology BAS guidance:

- **Functioning buffer width standard** (well vegetated, appropriate soils with mild to no slope) that protects wetland
 - ❑ Very few in Kirkland
 - ❑ Narrower buffer width is adequate (see next slide)

- **Degraded buffer width standard** (lawn, sparsely vegetated and/or invasive, inappropriate soils) that does not protect wetland
 - ❑ Typical in Kirkland
 - ❑ Wider buffer with option to reduce buffer width by **25%** and/or average width with mitigation to upgrade buffer = same buffer width as functioning buffer



RECOMMENDATION FOR WETLAND BUFFERS WIDTH

Current wetland buffers in KZC 90

Wetland type	Buffer in primary basin (feet)	Buffer width in secondary basin (feet)
I	100	75
2	75	50
3	50	25

Current wetland buffers in SMP

Wetland Category	Range of Buffer widths based on habitat score (feet)
I: Bogs	215
I: All others	125-215
II	100-200
III	75-125
IV	50

- **Staff recommendation:** Degraded buffer width standard with option to reduce and average buffer.

Allow exception to use functioning buffer width standard if City determines buffer meets specific criteria.

Functioning Buffer Widths (Ecology BAS) with no reduction

Wetland Type	Buffer width (in ft.) based on habitat score			
	3-4	5	6-7	8-9
I: Bogs	--	190	--	225
I: All others	75	105	165	225
II	75	105	165	225
III	60	105	165	225
IV	40	40	40	40

Degraded Buffer Widths (Ecology BAS) with option to reduce and average with mitigation

Wetland Type	Buffer width (in ft.) based on habitat score			
	3-4	5	6-7	8-9
I: Bogs	--	250	--	300
I: All others	100	140	220	300
II	100	140	220	300
III	80	140	220	300
IV	55	55	55	55

WETLAND BUFFER REDUCTION AND AVERAGING

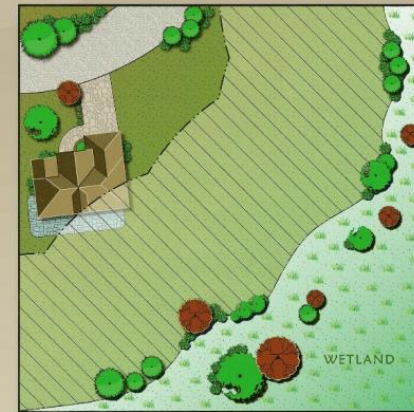
- **Buffer Reduction**

- Maximum reduction of **25%** of buffer width

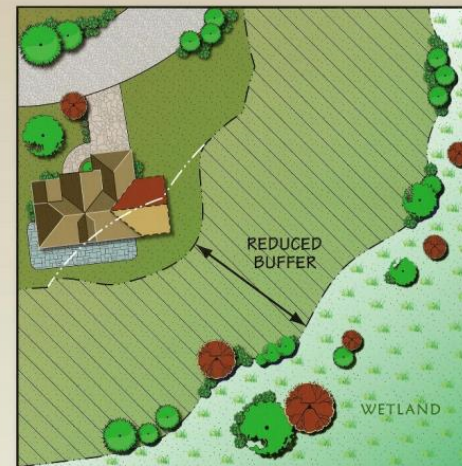
- **Buffer Averaging**

- Varying buffer width but total square foot of buffer area same as for 25% reduction option with **narrowest portion no less than 25% of the reduced buffer width**

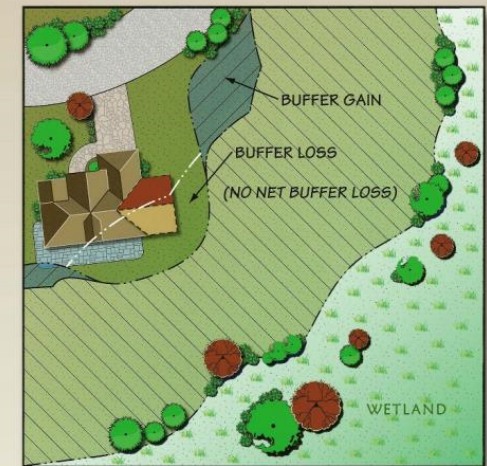
- Mitigation required for both options



PROPOSED BUFFER



BUFFER REDUCTION



BUFFER AVERAGING

MITIGATING MEASURES FOR REDUCTION AND AVERAGING

- **Native planting**, and augmentation of soil and other improvements if needed
- **Minimizing impacts** to wetlands (page 8 of memo):
 - Lights: direct lights away from wetland
 - Noise: locate outdoor activities away from wetland and enhance buffer further if needed
 - Stormwater runoff: retrofit stormwater treatment, stop channelized flow from lawn, and use LID
 - Change in water regime: treat runoff from impervious surfaces and lawns
 - Pets and human disturbance: discourage intrusions into buffers and wetlands/streams
 - Toxic runoff: route untreated water away from wetland while ensuring water source to wetland, limit use of pesticides, and pest management
 - Dust: control dust with best management practices
 - Wildlife corridors: maintain or restore connections



Staff Recommendation: *Include mitigating measures for reduction and averaging of buffers*

MITIGATION SEQUENCING

- Mitigation Sequencing



Analysis to reduce impacts within framework of project's objectives, in order of preference

- **Staff recommendation:** *Include mitigation sequencing in most cases for impacts to wetlands and/or their buffers*

WETLAND COMPENSATORY MITIGATION (BAS)

- **Mitigation Compensation** used to replace loss function of wetlands, in order of preference:
 1. Re-establish or rehabilitate (Example: remove fill or dike. Does not add new wetland)
 2. Creation/establish (Adds new wetland: need water source, certain slope and other factors)
 3. Enhancement (Install native plantings. Results in loss of wetland)
 4. Preservation (Protect high functioning wetland elsewhere. Results in loss of wetland)

Staff recommendation: *Include wetland compensatory mitigation*

Mitigation Ratios for Wetland Modifications (BAS Ecology guidance)

WETLAND MITIGATION RATIOS (BAS)

Category of Wetland Impacted	Creation	Re-establishment-Rehabilitation Only	Creation and Rehabilitation	Creation and Enhancement	Enhancement Only
Category IV	1.5:1	3:1	1:1 C and 1:1 RH	1:1 C and 2:1 E	6:1
Category III	2:1	4:1	1:1 C and 2:1 RH	1:1 C and 4:1 E	8:1
Category II	3:1	6:1	1:1 C and 4:1 RH	1:1 C and 8:1 E	12:1
Category I: Forested	6:1	12:1	1:1 C and 10:1 RH	1:1 C and 20:1 E	24:1
Category I: Bog	Not possible	6:1 RH of a bog	Not possible	Not possible	Case-by-case
Category I: based on total functions	4:1	8:1	1:1 C and 6:1 RH	1:1 C and 12:1 E	16:1 E

Staff Recommendation: Include mitigation ratios for impacts to wetland and/or their buffers

STREAM TYPING (BAS AND WAC)

Permanent Stream Typing System - WAC 222-16-030

Stream Type	Brief Description
F	Fish bearing (may be perennial or seasonal)
Np	Non-fish bearing perennial stream
Ns	Non-fish bearing seasonal stream

Staff recommendation: Use stream typing system per WAC 222-16-030

STREAM BUFFER WIDTH (BAS)

■ Buffer Widths

Current stream buffers in KZC 90

Stream Class	Buffer width for streams in primary basin (feet)	Buffer width for streams in secondary basin (feet)
A	75	N/A
B	60	50
C	35	25

Current stream buffers applicable to annexation area in SMP

Stream Type	Buffer width (feet)
F	115
N	65
O (Other)	25

Functioning Stream Buffers Width Standard (no reduction)

Stream Type	Buffer Width
F	100 feet
Np	50 feet
Ns	50 feet

Degraded Stream Buffer Width (reduction and averaging)

Stream Type	Buffer Width
F	115 feet
Np	65 feet
Ns	50 feet

- **Staff recommendation:** Degraded buffer width standard with option to reduce and/or average buffer width, unless buffer meets high functioning buffer criteria. Same as shoreline buffer widths.

STREAM BUFFER REDUCTION & AVERAGING (BAS)

■ Buffer Reduction

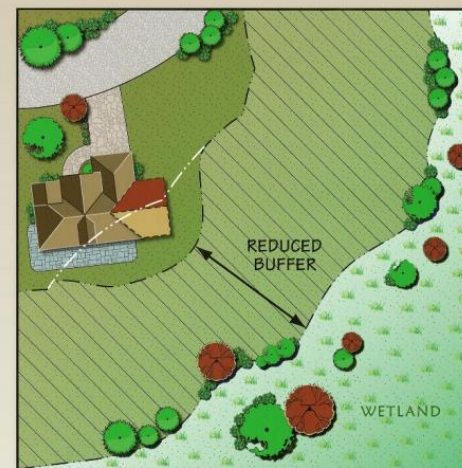
- Maximum reduction of 25% of buffer width

■ Buffer Averaging

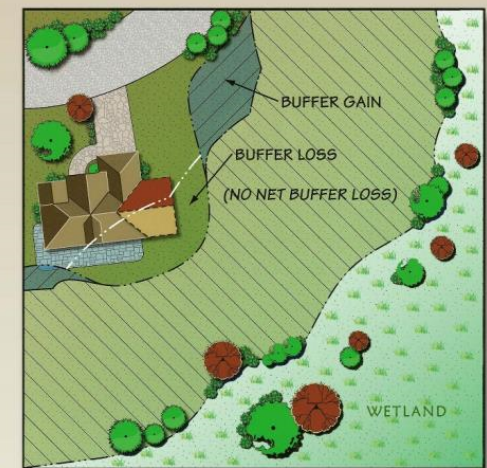
- Varying buffer width but total square foot of buffer area same as 25% reduction and narrowest portion no less than:
 - Stream Type F = 75 feet
 - Stream Type Np = 30 feet
 - Stream Type Ns = 30 feet
- Mitigation required for both options



PROPOSED BUFFER



BUFFER REDUCTION

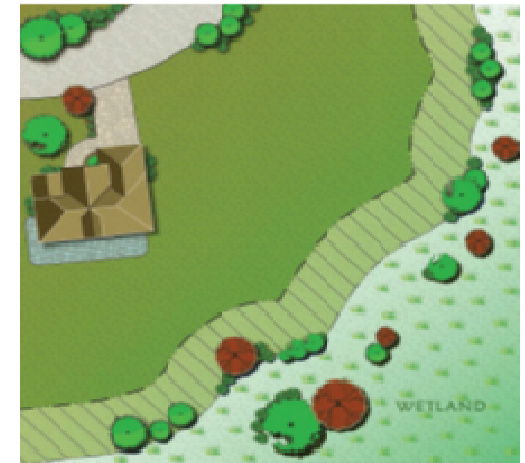


BUFFER AVERAGING

SETBACK FROM BUFFER (BAS)

- **Setback from buffer** required for the following so that buffer is not used:
 - Installation of improvements
 - Activities associated with improvements
 - Repair and maintenance of improvements
- Existing Chapter 90 requires a **10'** setback from buffer, which is adequate
 - Other local jurisdictions require 15' or 20' which staff thinks is more than necessary
 - City has flexibility in the width of the setback

Staff recommendation: Continue requiring 10' setback from buffer edge



Setback from buffer is in striped area

MINOR IMPROVEMENTS IN SETBACK FROM BUFFER

- Existing Chapter 90 state what **minor improvements** can be in setback from buffer:
 - Walkways, pedestrian bridges, benches
 - Similar features as determine by the Planning Official

- Minor improvements that staff has allowed as **similar features**:
 - Ground level decks, patios and associated railings can extend 5' into the 10' setback
 - Chimneys, bay windows, eaves, 2nd floor decks, cornices, awnings and canopies can extend 18" into the 10' setback
 - Flag poles, rockeries 4' and under, garden sculpture, light fixtures, trellises, non-native landscaping
 - Driveways, parking areas and stormwater conveyances

MINOR IMPROVEMENTS IN SETBACK FROM BUFFER

- Staff supports other minor improvements that would be allowed under **KZC 115.115 Required Yards** with maximum encroachments listed on page 19 of staff memo
- No improvement should be closer than 1 foot from buffer edge to avoid intrusion into buffer

Staff recommendation: Continue with 10' setback from buffer edge. Allow minor improvements outright in buffer setback area with maximum encroachment standards as listed on pages 18-19 of staff memo

CRITERIA FOR MINOR IMPROVEMENTS IN BUFFER SETBACK

- Existing **criteria** for allowing minor improvements in buffer setback include no degradation of habitat or water quality functions of buffer (KZC 90.45.2 and 90.90.2)
- This is **not purpose** of setback from buffer so criteria should be deleted

Staff recommendation: Delete criteria referencing degradation of habitat or water quality functions of buffer

REASONABLE USE EXCEPTION

- **Legal concept** articulated in courts on regulatory takings cases
- **Balance** between the property owner's viable use of land versus harm from impact as described on page 19 of staff memo and KZC 90.40.2
- City's current reasonable use exception allows the following uses when application of Chapter 90 prevents any development:
 - **Single family use** in residential zone
 - **Office use** in commercial or industrial zones

REASONABLE USE EXCEPTION

- Existing regulations limit development to the following **area of disturbance**:

Lot Size	Area of Disturbance
Less than 6,000 sq. ft. lot	50% of the lot area can be disturbed
Between 6,000 and 30,000 sq. ft. lot	3,000 sq. ft. area can be disturbed
Larger than 30,000 sq. ft. lot	Between 3,000 sq. ft. area and 10% of the lot area can be disturbed, determined on a case by case basis.

- Area of disturbance includes grading, utilities, building and paved areas, decks and landscaping.

ISSUES WITH EXISTING REASONABLE USE REGULATIONS

1. Allow reasonable use in **office** and **institutional** zones
 - Same impacts by zone. Other jurisdictions allow them.
2. Apply to **limited retail uses** in commercial and industrial zones (see public comment letter)
 - Similar impacts as office if retail is limited to no drive-thru, outdoor activities or storage
3. Allow **off-site mitigation** elsewhere in Kirkland or in regional watershed
 - Most sites have little to no area to do mitigation on-site and Chapter 90 only permits off-site in same drainage basin
4. Change **lapse of approval** to match other zoning permits
 - Requires submittal of building permit in 1 year with a 1-year extension. Other permits give 5 years.

ISSUES WITH EXISTING REASONABLE USE REGULATIONS

5. Allow **modification to garage width standards** (garage not > than 50% of front façade width)
 - Need flexibility similar to lots less than 55' wide which are already exempted from standard
 6. Clarify that reasonable use exception not applicable for **lots created through a subdivision**
 - Exception is for existing lots and not newly created lots
 7. Clarify that reasonable use exception can only be on a **legal building site**
 - Some property owners own several contiguous lots that are constrained by Chapter 90 regulations.
 - Each lot must meet definition of legal building site to be eligible for reasonable use.
- **Staff recommendation:** *Revise Reasonable Use regulations as described in issues 1-7 above*



NEXT STEPS

- Planning Commission March 24, 2016
 - 2nd round of policy issues
- Planning Commission April 28, 2016
 - 3rd round of policy issues